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Monthly Statistical Report

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SUMMARY

Reversing the first half's 0.7 percent increase, total deliveries fell 0.9 percent for the third quarter. The contrast is actually greater than at first apparent since first-half growth would have been higher had not deliveries been temporarily depressed by mild winter weather.

The weakness in petroleum demand indicated by these deliveries figures is borne out in estimated underlying consumption trends for most major products, even those which had large apparent gains in deliveries for the quarter. Gasoline deliveries for the third quarter were lackluster, fuel switching brought residual fuel oil demand down substantially, and demand for petrochemical feedstocks slackened from previous strong levels.

Even for distillates and kerosine jet fuel, which both showed substantial gains in deliveries in recent months, underlying consumption growth was likely less than that of deliveries. Distillate fuel oil consumption is estimated to have increased at perhaps half the 4.3 rate for deliveries, and air traffic indicates that actual kerosine jet fuel usage is likely flat, despite the third-quarter increase in deliveries of 7.4 percent. Thus, even excluding the switching-related decline for residual fuel oil, petroleum consumption growth appears to have flattened in the third quarter.

Though deliveries were weak, imports requirements were still rising during the quarter because of domestic crude oil production's fall-off of more than half a million B/D or 6.6 percent versus one year earlier. Actual imports rose even more, averaging an estimated 350 thousand B/D greater than needed to maintain current deliveries and normal inventory patterns for the quarter. However, even without the above-normal inventory build, imports for the year to date would have risen nearly 8 percent, largely because of the decline in domestic production. The actual nine-month increase in imports was 10 percent, or more than 700 thousand B/D.

Departing from the typical August-September pattern, refinery activity in September remained high. Distillate production for the month jumped nearly 9 percent from one year earlier, keeping distillate stocks' rise to a near-normal 6 million barrels despite unusually strong deliveries.

PRODUCT SUPPLIED

Gasoline

DELIVERIES WEAK FOR QUARTER. Gasoline deliveries' weakness of the past several months continued in September, with deliveries falling 2.7 percent, year to year. For the quarter as a whole, deliveries were down a little more than 1 percent.

These declines suggest that the increase in prices earlier this year has still been having a dampening effect on consumption, though perhaps not quite as large as the deliveries declines indicate. Since May, retail gasoline prices have retraced only about a third of the January-to-May increase of about 15 cents per gallon. Once September's contraseasonal uptick is included, prices for the month, adjusted for inflation, were still about 6 percent higher than a year ago.

The slowing in gasoline demand has also been indicated in data on miles traveled. Growth in highway travel, which had averaged about 3.5 percent in 1988, slipped progressively from a little over 3 percent in March and April to 2.5 percent in May and June and to 1.9 percent in July. Since then, we estimate that year-to-year increases in travel have at best continued at July's rate.

Distillates

UNUSUALLY STRONG DELIVERIES LIKELY EXCEED CONSUMPTION. In contrast to gasolines' weak performance, distillate deliveries continued strong in September, rising nearly 7 percent over one year earlier to the highest September level ever. The increase for the quarter as a whole averaged 4.3 percent, a jump at least twice as large as estimated for consumption growth. However, such fluctuations in deliveries growth rates have not been unusual for distillate fuel oil in recent years. Even when averaged over quarters, year-to-year growth rates have deviated from annual growth rates by 4 percentage points or more about a third of the time.

	API ESTIMATES SEPTEMBER		YEAR-TO-DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	16.9	(0.9)	17.1	0.1
Crude production*	7.5	(5.3)	7.7	(6.4)
Total imports*	8.3	11.3	8.0	10.0
Stocks (million bbl)*	1,091	1.6	na	na

Any continued growth in distillate demand in recent months has likely come from increases in transportation use, particularly in on-highway diesel, corresponding with the continued expansion of the economy. Rail traffic, however, has been down slightly in recent months, in large part due to lower grain shipments. September's weather, though colder than normal in some regions, was close to year-ago experience in the Northeast and likely had only a minor effect on heating oil consumption.

Over the longer term, demand in the residential and commercial sectors, which only account for about a quarter of annual average distillate fuel oil demand, has been relatively static over the past several years except for temporary weather fluctuations. Although heating oil's share of new housing in the Northeast has more than doubled from its share of 13 percent in 1981 to 30 percent in 1988, nationally it still accounts for only a little more than 5 percent of new construction. Natural gas, with a 54 percent share, and electric heat, with a 37 percent share, together still account for most of new housing's heating fuels.

Residual Fuel Oil

FUEL SWITCHING CUTS DEMAND. Residual fuel oil deliveries experienced another substantial decline in September, falling 17 percent versus one year earlier. This, combined with August's sizable decline and a smaller increase for July, brought the third quarter's drop to 10 percent—contrasting with the first half's roughly 4 percent increase.

As has often been the case, much of residual fuel oil's swings can be explained by the ease of fuel switching for a significant part of the market in response to changes in the relative costs of competing fuels. With residual fuel oil prices rising during September and spot natural gas prices continuing to soften, spot natural gas prices for the month are estimated to have been 10 to 15 percent lower than a year ago and residual fuel oil prices 10 to 20 percent higher.

With these developments strengthening the incentives for fuel substitution, the electric utility and industrial markets, which together account for about two thirds of residual fuel oil demand, are believed to have accounted for most of September's deliveries decline.

Kerosine Jet Fuel

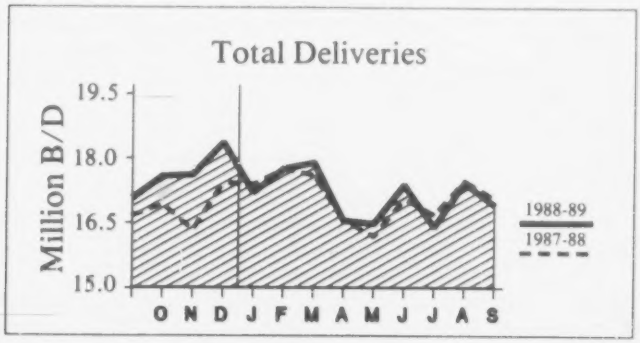
DELIVERIES STRONG DESPITE FLAT AIR TRAFFIC. Deliveries of kerosine jet fuel were up more than 13 percent for September and over 7 percent for the quarter—both much stronger increases than the first half's rise of only a little more than 1 percent.

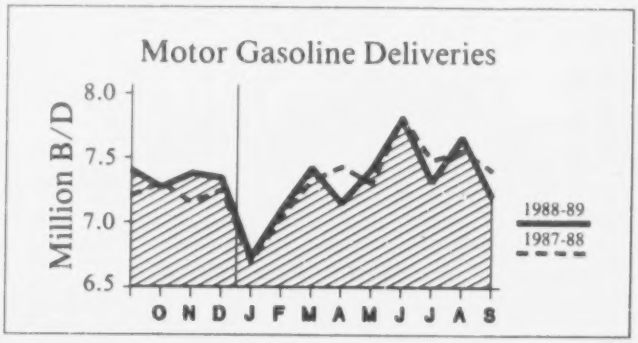
Air traffic growth, however, has followed a different pattern. In 1988, miles flown had risen about 4 percent; growth this year has progressively flattened from the first quarter's 1.8 percent increase to the roughly even performance of the most recent quarter. Because of their recent strength, deliveries, even averaged over the first nine months of the year, likely overstate actual consumption growth: deliveries have risen 3.2 percent for the year to date, while miles flown are estimated to have risen less than one percent for the same period.

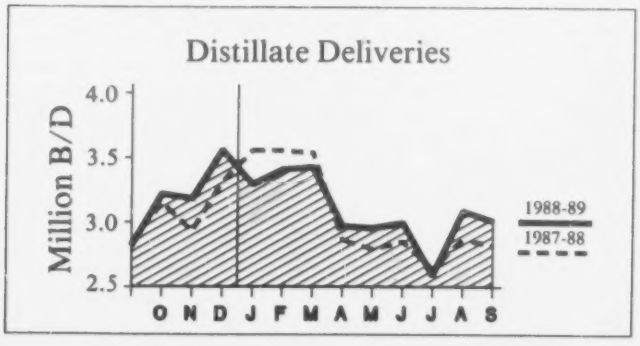
Other Oils

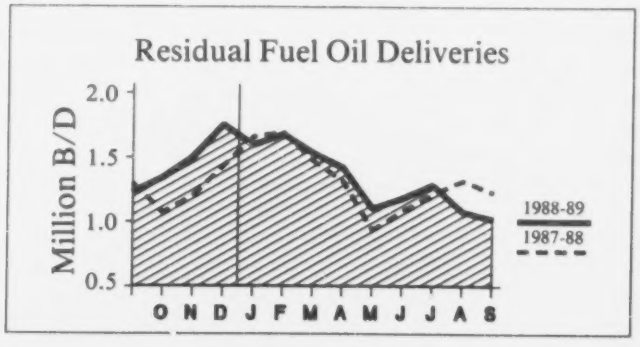
DOWN 2.7 PERCENT FOR THE QUARTER. Deliveries of other oils dropped 2.9 percent in September compared with one year earlier, continuing the weakness already evident in recent previous months. The quarter's 2.7 percent decline contrasted with the first half's rise of 1.7 percent, an increase due primarily to growth in deliveries of liquefied petroleum gases and additional refinery gas output as a byproduct of strong utilization levels.

The more recent decline is believed to be largely the result of slackening demand for petrochemical feedstocks, particularly ethane. Colder-than-normal September weather in the Midwest,









a major region for residential/commercial usage, is believed to have had only a minor effect on propane deliveries at this early stage of the heating season.

The recent slackening in petrochemical-derived demand contrasts with the 1988's strength, as shown in the recently-released *Sales of Natural Gas Liquids and Liquefied Refinery Gases*. That report, performed by API in conjunction with the Gas Processors Association and the National Propane Gas Association, shows ethane sales rose 7.3 percent last year after several years of decline.

In fact, the report shows that chemical uses of all LPGs rose except for propane. However, propane sales held their own overall due to increases for heating and industrial uses. With tightening standards for gasoline volatility in some areas, sales declined for LPGs used for gasoline blending (counted as part of gasoline rather than as "other oils" in API's and DOE's deliveries data). As in previous years, the Gulf Coast area (PADD III) accounted for the largest regional share of sales of LPGs and LRGs, at nearly 60 percent.

SUPPLY

Production

CRUDE OUTPUT FALLS MORE THAN HALF MILLION B/D.

Domestic crude oil production fell 5.3 percent in September against a year-ago level which had already been temporarily depressed by hurricane precautions in the Gulf last September. For the quarter, production fell more than half a million B/D or 6.6 percent; though the quarterly comparison is affected by the deviation in offshore production last September, this was more or less balanced by a temporary cutback in North Slope production this July for maintenance work.

Alaskan production for September was down by more than 140 thousand B/D or 7 percent from one year earlier; since its peak a year and a half ago, Alaskan production has fallen by roughly 200 thousand B/D or 10 percent. When combined with the steady decline in lower 48 production since early 1986, domestic crude oil production has dropped nearly 1.7 million B/D or 18 percent in the past three and a half years.

Imports

GROWTH IN IMPORTS CONTINUES.

With imports in September receding only slightly from August's high level, total imports' share of domestic deliveries remained near 50 percent for the third month in a row. For the quarter, imports averaged nearly 8.4 million B/D, roughly 350 thousand B/D above levels needed to maintain current deliveries and normal inventory patterns.

Even so, this year's accelerated decline in domestic crude oil production has kept the underlying trend in imports growing steadily, even though deliveries growth has recently slowed. If adjusted for shifts in inventory building and withdrawals, imports for the year to date would have risen 550 thousand B/D or nearly 8 percent. The actual increase in imports for the first nine months averaged 10 percent or more than 700 thousand B/D.

Though temporary problems at some Caribbean refineries resulting from hurricane Hugo may have played a minor role, product imports' September decline of 11.8 percent continued a longer pattern of decreases. For the quarter, product imports of 2.1 million B/D, which have mostly shown year-to-year declines since May, were off nearly 9 percent, or about 200 thousand B/D. Imports of gasoline and residual fuel oil were down by roughly 100 thousand B/D and 115 thousand B/D respectively. Kerosine jet fuel imports rose 30 thousand B/D.

Though down year-to-year for September alone, distillate imports were up for the quarter by about 20 thousand B/D, continuing the trend of the last several years towards increased incremental supplies from imports. Distillate imports for the first nine months of about 310 thousand B/D are roughly 135 thousand B/D higher than for the same period in 1985.

Refinery Operations

DISTILLATE OUTPUT JUMPS 9 PERCENT FOR SEPTEMBER...

Contrary to the usual August-September decrease, September's utilization continued near August's level of 90 percent of operable capacity—or 93 percent of capacity in actual operation. Over the past five years, the average August-September decline in input to distillation units has been 1.8 percent, versus this year's month-to-month decline of only 0.3 percent.

As a result, input to distillation units was up 5 percent from a year ago, with the focus continuing on supplying strong distillate deliveries. Distillate output reached more than 3 million B/D, up nearly 9 percent from a year ago and the highest September level in ten years. Gasoline production rose 2.3 percent and residual fuel oil output increased 3.5 percent despite lagging deliveries for both products.

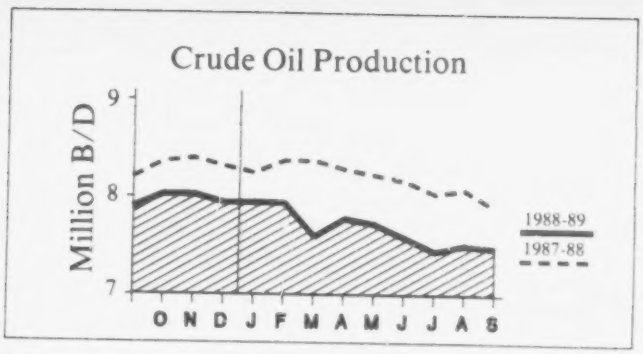
Inventories

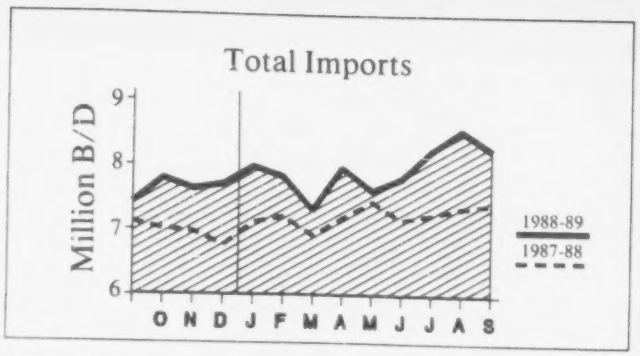
...BUT DISTILLATE STOCKS INCREASE AVERAGE AMOUNT.

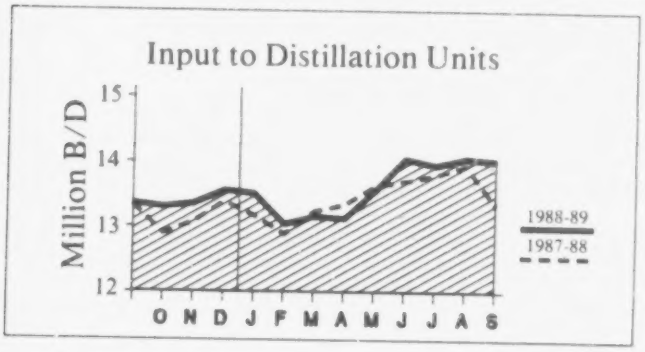
Total stocks rose 14 million barrels in September, about average for the month. But for the quarter as a whole, stocks rose approximately 35 million barrels more than normal, putting total inventories at about 2 percent above one year earlier.

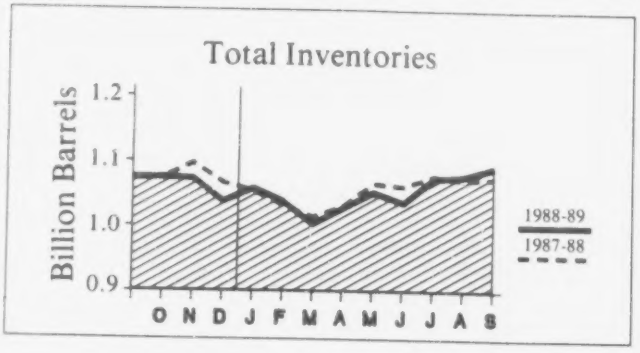
Despite record-setting deliveries, the high level of refinery production pushed distillate stocks up by 6 million barrels, or about average for September. At month end, they stood at 123 million barrels, a level below average for the month but within the 117-152 million barrel range of the previous five Septembers.

It should be noted that distillate stock draws have accounted for only a minor part of winter distillate supplies in recent years. Taking last season as a fairly typical example, the October-March draw amounted to only about 6 percent of distillate deliveries for the period. Refinery output, at 86 percent, accounted for by far the largest portion of supplies, with net imports making up the remainder.









1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 555 million barrels as of September 30, 1989).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	SEPTEMBER			YEAR-TO-DATE		
	1989[1]	1988[2]	% Change	1989[3R]	1988[2]	% Change
Products Supplied:						
Total motor gasoline	7,203	7,404	(2.7)	7,312	7,338	(0.4)
Finished leaded motor gasoline*	711	1,289	(44.8)	891	1,385	(35.7)
Finished unleaded motor gasoline*	6,492	6,115	6.2	6,421	5,953	7.9
Naphtha-jet	198	207	(4.3)	206	210	(1.9)
Kerosine-jet	1,376	1,216	13.2	1,263	1,224	3.2
Distillate fuel oil	3,013	2,821	6.8	3,081	3,054	0.9
Residual fuel oil	1,021	1,230	(17.0)	1,321	1,325	(0.3)
All other oils[4]	4,316	4,444	(2.9)	4,108	4,103	0.1
Reclassified[5]	- 203	- 250	(18.8)	- 175	- 163	7.4
Total domestic products supplied	16,924	17,072	(0.9)	17,116	17,091	0.1
Exports	876	673	30.2	845	814	3.8
Total products supplied	17,800	17,745	0.3	17,961	17,905	0.3
Supply:						
Domestic production:						
Crude oil[6]	7,479	7,895	(5.3)	7,666	8,188	(6.4)
Natural gas liquids	1,547	1,621	(4.6)	1,595	1,615	(1.2)
Other supply[7]	970	885	9.6	938	895	4.8
Total domestic supply	9,996	10,401	(3.9)	10,199	10,698	(4.7)
Imports:						
Crude oil, total	6,234[10/]	5,128[10/]	21.6	5,731[10/]	4,996[10/]	14.7
Canadian	628	626	0.3	620	684	(9.4)
Other	5,606	4,502	24.5	5,111	4,312	18.5
Products, total	2,024	2,294	(11.8)	2,224	2,236	(0.5)
Residual fuel oil	423	698	(39.4)	617	596	3.5
Other	1,601	1,596	0.3	1,607	1,640	(2.0)
Total imports	8,258	7,422	11.3	7,955	7,232	10.0
Total supply	18,254	17,823	2.4	18,154	17,930	1.2
Stock change, all oils	+ 454	+ 78	XXXX	+ 193	+ 25	XXXX
Refinery Operations						
Input to crude oil distillation units	14,019	13,356	5.0	13,611	13,461	1.1
Operable capacity	15,576	15,965	(2.4)	15,657	15,928	(1.7)
Refinery utilization (%)[8]	90.0%	83.7%	7.5	86.9%	84.5%	2.8
Crude oil runs	13,834	13,261	4.3	13,435	13,255	1.4

Stocks (millions bbls.)	1989		1988[2]	% Change from . . .	
	Sep. 30[9]	Aug. 31[9]	Sep. 30	Previous Month	Year Ago
Crude oil [10/]	334.4	335.8	328.6	(0.4)	1.8
Unfinished oils	105.2	105.7	109.2	(0.5)	(3.7)
Total motor gasoline**	224.3	217.7	221.3	3.0	1.4
Finished leaded motor gasoline*	21.7	22.2	41.9	(2.3)	(48.2)
Finished unleaded motor gasoline*	162.1	156.5	140.8	3.6	15.1
Naphtha-jet	7.0	6.2	6.5	12.9	7.7
Kerosine-jet	40.4	41.7	40.1	(3.1)	0.7
Distillate fuel oil	122.6	116.8	131.5	5.0	(6.8)
Residual fuel oil	44.9	42.2	44.6	6.4	0.7
All other oils	211.7	210.7r/	191.9	0.5	10.3
Total all oils	1,090.5	1,076.8r/	1,073.7	1.3	1.6

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-July, U.S. Department of Energy, August-September, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	3rd QUARTER		
	1989[1]	1988[2]	% Change
Products Supplied:			
Total motor gasoline	7,395	7,482	(1.2)
Finished leaded motor gasoline*	756	1,317	(42.6)
Finished unleaded motor gasoline*	6,639	6,165	7.7
Naphtha-jet	209	207	1.0
Kerosine-jet	1,305	1,215	7.4
Distillate fuel oil	2,897	2,777	4.3
Residual fuel oil	1,131	1,256	(10.0)
All other oils[3]	4,166	4,283	(2.7)
Reclassified[4]	- 179	- 137	30.7
Total domestic products supplied	16,924	17,083	(0.9)
Exports	846	772	9.6
Total products supplied	17,770	17,855	(0.5)
Supply:			
Domestic production:			
Crude oil[5]	7,479	8,006	(6.6)
Natural gas liquids	1,552	1,618	(4.1)
Other supply[6]	1,000	1,016	(1.6)
Total domestic supply	10,031	10,640	(5.7)
Imports:			
Crude oil, total	6,288[9/]	5,083[9/]	23.7
Canadian	606	675	(10.2)
Other	5,682	4,408	28.9
Products, total	2,068	2,262	(8.6)
Residual fuel oil	470	585	(19.7)
Other	1,598	1,677	(4.7)
Total imports	8,356	7,345	13.8
Total supply	18,387	17,985	2.2
Stock change, all oils	+ 617	+ 130	XXXX
Refinery Operations			
Input to crude oil distillation units	14,010	13,708	2.2
Operable capacity	15,613	15,960	(2.2)
Refinery utilization (%)[7]	89.7%	85.9%	4.4
Crude oil runs	13,851	13,546	2.3

Stocks (millions bbls.)	3rd QUARTER		
	1989[8]	1988[2]	% Change
Crude oil	334.4[9/]	328.6[9/]	1.8
Unfinished oils	105.2	109.2	(3.7)
Total motor gasoline**	224.3	221.3	1.4
Finished leaded motor gasoline*	21.7	41.9	(48.2)
Finished unleaded motor gasoline*	162.1	140.8	15.1
Naphtha-jet	7.0	6.5	7.7
Kerosine-jet	40.4	40.1	0.7
Distillate fuel oil	122.6	131.5	(6.8)
Residual fuel oil	44.9	44.6	0.7
All other oils	211.7	191.9	10.3
Total all oils	1,090.5	1,073.7	1.6

1/ Source: U.S. Department of Energy, July; August-September, API.
2/ Source: U.S. Department of Energy.
3/ Includes crude losses.
4/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassifed during the production phase. So that there will be no double counting of these volumes, they are substracted from total domestic products supplied.
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